

IN THE CLAIMS:

- 1 1. (Currently amended) A computerized data file system, comprising:
2 a first process that maintains a data file stored in a computer-readable memory; and
3 a second process that generates a first message requesting that said second process be
4 granted by said first process a plurality of tokens required for said second process to modify
5 at least one characteristic of said file stored in said computer-readable memory, [;]
6 said first process generating a second message, in response to said first
7 message, that grants said tokens to said second process if said tokens are available for
8 grant to said second process, and
9 if said tokens are granted, said second process modifying the at least one
10 characteristic of said data file as maintained by said first process in said computer-
11 readable memory without said second process receiving a copy of said data file.
- 1 2. (Original) A system according to claim 1, wherein:
2 said first process is resident at a server computer node, and said second process is
3 resident at a client computer node.
- 1 3. (Original) A system according to claim 1, wherein:
2 if any of said tokens are unavailable for grant to said second process as a result of
3 current grant of said tokens to at least one other process, said first process generates a third
4 message revoking the current grant of said tokens to said at least one other process.
- 1 4. (Original) A system according to claim 3, wherein:
2 said at least one other process, in response to said third message, generates a fourth
3 message making said tokens available for grant by said first process.
- 1 5. (Original) A system according to claim 3, wherein:
2 said first process resides in a first computer node;
3 said second process resides in a second computer node;

4 said at least one other process resides in at least one other computer node; and
5 said first computer, second computer, and at least one other computer nodes are
6 networked together and are remote from each other.

1 6. (Currently amended) A computer node, comprising:
2 a first process residing in ~~said the~~ node that generates a first message that grants a set
3 of tokens, if the set of tokens is available for grant, to a second process that requested grant
4 of the set of tokens, the set of tokens being required for the second process to be able to
5 modify at least one characteristic of a file stored in a computer-readable memory within the
6 computer node,
7 if the second process receives the set of tokens, the second process modifying
8 the at least one characteristic of the file without receiving a copy of the file.

1 7. (Previously presented) A node according to claim 6, wherein:
2 the second process resides in a remote computer node.

1 8. (Previously presented) A node according to claim 7, wherein:
2 one of the first and second processes resides in a server computer node and the other
3 of the processes resides in a client computer node.

1 9. (Original) A node according to claim 6, wherein:
2 if at least one token in the set of tokens is unavailable for grant because the at least
3 one token is currently granted to a third process, the first process also generates a second
4 message that revokes current grant of the at least one token to the third process prior to
5 generating the first message.

1 10. (Original) A node according to claim 6, wherein:
2 the first message is generated by the first process in response to a request for the grant
3 of the set of tokens generated by the second process, the request specifying all tokens
4 required for the second process to be able to modify the at least one characteristic of the file.

1 11. (Currently amended) A computer node, comprising:
2 a first process residing in said node that generates a request to a second process for
3 grant of a set of tokens required to enable the first process to modify at least one
4 characteristic of a file residing in a remote computer-readable memory,
5 if the first process receives the set of tokens, the first process modifying the at
6 least one characteristic of the file residing in the remote computer-readable memory
7 without receiving a copy of the file.

1 12. (Original) A node according to claim 11, wherein:
2 the second process resides in a second computer node, and the memory is comprised
3 in said second node.

1 13. (Original) A node according to claim 11, wherein:
2 the set of tokens comprises all tokens required for the first process to be able to
3 modify the at least one characteristic of the file.

1 14. (Currently amended) A network computer system, comprising:
2 a first computer node having a data file stored in a computer-readable memory; and
3 a second computer node that issues to the first computer node a first message
4 requesting grant of a set of tokens required to carry out a modification of at least one
5 characteristic of ~~said the~~ file stored in the first computer node, [;]
6 the first computer node issuing a second message to the second computer node
7 after receipt of the first message, the second message granting the set of tokens to the
8 first process if the set of tokens is available for grant to the second process, and
9 if the set of tokens are granted, the second computer node modifying the at
10 least one characteristic of the file stored in the first computer node without the second
11 computer node receiving a copy of the file.

1 15. (Previously presented) A system according to claim 14, wherein:

2 the first computer node is a server node, and the second computer node is a non-
3 server node.

1 16. (Previously presented) A system according to claim 14, wherein:

2 the set of tokens comprises all tokens required to carry out the modification of the at
3 least one characteristic of the file.

1 17. (Previously presented) A system according to claim 14, wherein:

2 if at least one token in the set of tokens is unavailable for the grant because the at
3 least one token is currently granted, the first computer node waits to issue the first message
4 until after the first computer node receives a third message from a third computer node
5 indicating relinquishment of current grant of the at least one token.

1 18. (Previously presented) A system according to claim 17, wherein:

2 the at least one token comprises a plurality of tokens.

1 19. (Currently amended) Computer-readable memory containing computer-executable
2 program instructions, the instructions comprising:

3 first instructions maintaining a data file in a computer storage memory;

4 second instructions generating a first message requesting grant, to a process, of a
5 plurality of tokens required to modify at least one characteristic of said file located in said
6 computer storage memory; ~~and~~

7 third instructions generating a second message, in response to said first message, that
8 grants said tokens if said tokens are available for grant to said ~~second~~ process; ~~and~~

9 fourth instructions, responsive to the plurality of tokens being granted, modifying the
10 at least one characteristic of said data file located in said computer storage memory without
11 said process receiving a copy of said data file.

1 20. (Currently amended) Computer-readable memory containing computer-executable

2 program instructions, the instructions comprising:

first instructions generating a first message that grants a set of tokens, if the set of tokens is available for grant, to a requester of the set of tokens, the set of tokens being required to permit the requester to be able to modify at least one characteristic of a file stored in computer storage memory, and
second instructions, responsive to the set of tokens being granted to the requester, modifying the at least one characteristic of the file stored in the computer storage memory without the requester receiving a copy of said data file.

21. (Currently amended) Computer-readable memory containing computer-executable program instructions, the instructions comprising:

first instructions generating a request for grant of a set of tokens required to enable modification by an issuer of the request of at least one characteristic of a file residing in a storage memory; and
second instructions, responsive to the set of tokens being granted to the issuer, modifying the at least one characteristic of the file residing in the storage memory without the issuer receiving a copy of the file.

22. (Previously presented) Computer-readable memory according to Claim 19, further comprising:

further instructions generating a third message, if any of said tokens are unavailable for grant as a result of a current grant of said tokens, revoking the current grant of said tokens.

23. (Previously presented) A computer-readable memory according to claim 22, wherein:

said further instructions, in response to said third message, generate a fourth message making said tokens available for grant.

24. (Previously presented) Computer-readable memory according to claim 20, further comprising:

3 further instructions generating a second message, if at least one token in the set of
4 tokens is unavailable for grant because the at least one token is currently granted, that
5 revokes previous grant of the at least one token prior to generating the first message.

1 25. (Previously presented) Computer-readable memory according to claim 20, wherein:
2 the first message is generated in response to a request for the grant of the set of tokens
3 generated, the request specifying all tokens required to be able to modify the at least one
4 characteristic of the file.

1 26. (Previously presented) Computer-readable memory according to claim 21, wherein:
2 the set of tokens comprises all tokens required to be able to modify the at least one
3 characteristic of the file.

1 27. (Currently amended) A computerized data file system, comprising:
2 means for maintaining a data file stored in a computer-readable memory; ~~and~~
3 means for generating a first message requesting grant of a plurality of tokens required
4 to modify at least one characteristic of said file stored in said computer-readable memory;
5 means for generating a second message, in response to said first message, that grants
6 said tokens if said tokens are available for grant; and
7 means for modifying said data file stored in said computer-readable memory, if said
8 tokens are granted.

1 28. (Previously presented) A system according to claim 27, further comprising:
2 means for generating, if any of said tokens are unavailable for grant as a result of
3 current grant of said tokens, a third message revoking the current grant of said tokens.

1 29. (Previously presented) A system according to claim 28, further comprising:
2 means for generating, in response to said third message, a fourth message making
3 said tokens available for grant.

1 30. (Currently amended) A computerized method for coherently maintaining and modifying a
2 data file, comprising:

3 maintaining ~~the~~ said data file in a computer-readable memory;
4 generating a first message requesting grant of a plurality of tokens required to modify
5 at least one characteristic of said data file in said computer-readable memory; ~~and~~
6 generating a second message, in response to said first message, that grants said tokens
7 if said tokens are available for grant; and
8 if said tokens are granted, modifying said at least one characteristic of said data file in
9 said computer-readable memory.

1 31. (Previously presented) A method according to claim 30, further comprising:
2 if any of said tokens are unavailable for grant as a result of current grant of said
3 tokens to at least one other process, generating a third message revoking the grant of said
4 tokens.

1 32. (Previously presented) A method according to claim 31, wherein:
2 in response to said third message, a fourth message making said tokens available for
3 grant is generated.

1 33. (Currently amended) A computerized method for use in maintaining coherency of a data
2 file stored in a computer-readable memory, comprising:
3 generating a first message that grants a set of tokens, if the set of tokens is available
4 for grant, to a requester of the grant of the set of tokens, the set of tokens being required for
5 the requester to be able to modify at least one characteristic of the file stored in the computer-
6 readable memory; and
7 in response to the set of tokens being granted to the requester, modifying the at least
8 one characteristic of the file stored in the computer-readable memory without the requester
9 receiving a copy of the file.

1 34. (Previously presented) A method according to claim 33, wherein:

2 if at least one token in the set of tokens is unavailable for grant because the at least
3 one token has been currently granted, the method also comprises a second message that
4 revokes current grant of the at least one token prior to generating the first message.

1 35. (Previously presented) A method according to claim 33, wherein:
2 the first message is generated in response to a request for the grant of the set of tokens
3 generated by the requester, the request specifying all tokens required for the requester to be
4 able to modify the at least one characteristic of the file.

1 36. (Currently amended) A computerized method for use in maintaining coherency of a data
2 file stored in a computer-readable memory, comprising:
3 generating a request for grant of a set of tokens required to enable modification of at
4 least one characteristic of the data file stored in the computer-readable memory; and
5 in response to the set of tokens being granted, modifying the at least one
6 characteristic of the data file stored in the computer-readable memory.

1 37. (Previously presented) A method according to claim 36, wherein:
2 the set of tokens comprises all tokens required to be able to modify the at least one
3 characteristic of the file.

1 38. (Previously presented) The system according to claim 1, wherein:
2 said second process, in response to receiving said second message, modifies said at
3 least one characteristic of said file stored in said computer-readable memory.

1 39. (Previously presented) The system according to claim 27, further comprising:
2 means for modifying said at least one characteristic of said file stored in said
3 computer-readable memory.

1 40 (Previously presented) The method according to claim 30, further comprising:

- 2 modifying said at least one characteristic of said file in said computer-readable
3 memory.